

HEAD TO THE **SKIES!**



An Aviation & Aerospace Initiative
For High School Students

Sponsored By
HoustonWorks USA
The *Defense Advanced Research Projects Agency (DARPA)*

Where: Texas Southern University – College of Science & Technology
When: Saturdays - March 24, 2012 thru April 28, 2012
Why: Opportunity for Youth to Explore Careers in Aviation/Aerospace
Industry, and Other STEM Related Fields

For Additional Information Call: 713-654-1919, Ext. 1149
Email: STEM@HoustonWorks.org



PROGRAM INFORMATION

Program Overview

HoustonWorks USA invites local high school students, who have an interest in aviation and/or aerospace, to participate in our newest STEM Institute Initiative - **AirSpace.Orb**. **AirSpace.Orb** is an aeronautics career-path program that offers six (6) half-a-day classes of academic learning centered on science, technology, engineering, and mathematics (STEM).

Starting on Saturday, March 24, 2012, **AirSpace.Orb** classes will begin on the campus of Texas Southern University, 3100 Cleburne Ave, in Houston's historic Third Ward. Fifty (50) slots are available to interested high school students seeking exposure to careers in Aviation/Aerospace, or any of the numerous opportunities in STEM related fields. Students must reside in the Houston or surrounding metropolitan area.

The goal of the **AirSpace.Orb** is to ignite the minds of young men and women, grades 9-11, by navigating their interest towards the many challenging career opportunities in the field of aviation and aerospace. The Aviation and Aerospace Industry offers career opportunities to suit many interests and backgrounds. The industry is not just limited to pilots, engineers, technologists, and astronomers. It also encompasses a variety of other related careers including: medicine, business, law, communications, and airport management and design.

This newly developed program will also provide youth with hands-on learning activities that will challenge them to set and achieve their desired goals. *The stakes are high, but the challenges are rewarding!*

Program Topics

AirSpace.Orb will offer empowering career related classes focusing on the following:

- **Introduction to Aviation & Aerospace**
- **Airport and Space Station Design**
- **Information Researching Skills**
- **Airport and Space Station Management**
- **Workforce Career & Professional Development**
- **'Virtual Skies'(Simulation Software)**
- **Piloting and Navigation**
- **Air Traffic Control**



Program Schedule

Each session is 3 hours in duration. All classes will be conducted from **8:00 A.M. to 12:30 P.M. with the exception of the first class which will be conducted from 8:00 A.M. to 3:30 P.M.** A total of six (6) sessions will be held starting on Saturday, **March 24, 2012**, and will conclude on Saturday, **April 28, 2012**. Students are required to attend all sessions, plus the orientation (with a parent).

Session 1: Saturday, March 24 (AM)
Session 2: Saturday, March 24 (PM)
Session 3: Saturday, March 31

Session 4: Saturday, April 14
Session 5: Saturday, April 21
Session 6: Saturday, April 28

No classes will be held during the Easter Holiday Weekend.

Program Rewards

All cadets who successfully complete the program

- Will receive a **\$200 stipend**
- Will receive their own flight suit
- Be eligible to join the **AirSpace.Orb** Alumni Club

Cadets must attend all six sessions, plus the orientation, to be eligible for stipend

Program Requirements

Only students with an interest in Aviation, Aerospace, or other STEM related disciplines need apply. Applicant, and at least one parent, must attend a mandatory orientation on **Saturday, March 3, 2011**. Time and location TBA! If accepted, applicants will be notified by February 20, 2012.

Eligibility requirements for the **AirSpace.Orb** consist of the following criteria:

- Must complete the application according to the instructions given on the form
- Must be a high school student (grades 9-11) and reside in the Houston Metropolitan area
- Must submit attached reference form from a teacher (math/science/technology)
- Must submit a **300 word essay** on: "*The importance of the aviation and aerospace industry in today's society*"

All applications and requirements must be submitted by

DEADLINE: FRIDAY, FEBRUARY 10, 2012

Send *complete* application to:
HoustonWorks STEM Institute

AirSpace.Orb

2118 Smith Street

Houston, Texas 77002

Or Fax To: 713-655-0715

Email: STEM@houstonworks.org



Airspace.Orb STUDENT APPLICATION FORM

DEADLINE: FEBRUARY 10, 2012

Please **PRINT CAREFULLY**

Fill in: Student/Family Information

Student Name		Gender: M__ F__
Parent Name		
Primary Address		
City, ST., ZIP Code		
Primary Phone		
Alternative Phone		
Parent's Email Address		
Student's Email Address		

Fill in: School Information

Student Grade Level				
Student Age				
School Name				
City				
District				
School Type	Private	Charter	Public	Homeschool

Answer:

Circle student's T-shirt size > Choices: Adult size S M L XL XXL

Have you participated in a HoustonWorks' Camp or Competition previously? _____

How did you hear about this event? _____

Fill in: Reference Information

Teacher Type	Math	Science	Technology
Teacher Name			
Teacher Phone			
Teacher Email Address			

The next page is to be filled out by the teacher who is giving the reference:



AirSpace.Orb STUDENT RECOMMENDATION FORM

PLEASE RETURN IN A SEALED ENVELOPE TO STUDENT PRIOR TO THE DEADLINE: FEBRUARY 10, 2012

This page to be filled out by Teacher

Student Name					
Teacher Name					
Teacher Email					
Subject Area	Math	Science	Technology	Other:	
Name of School					
School Address					
Place an X in column to indicate choice >	Continually	Often	Sometimes	Rarely	Never
<i>This student ...</i>					
...is eager to learn					
...cares about others					
...comes to class on time					
...turns in work on time					
...participates in class					
...works well with others					
...shows responsibility					
...displays appropriate behavior					
...has strong study habits					
...demonstrates an interest in STEM fields					

This student is a good candidate because? _____

Additional Comments Regarding Applicant

Thank you for your time with completing this form for your student. If you have any question(s), please feel free to contact Francheska Williams, at: 713-654-1919, Ext. 1212. This form can be faxed to: 713-739-0751. Or emailed to: STEM@Houstonworks.org. Our mailing address is: 2118 Smith Street, Houston, Texas 77002

Program Application Form & Teacher Recommendation Form Are Due By Friday February 10, 2012